

PASSIVE IMPROVED AIR TURBINE STARTER LUBRICATION SYSTEM

ABSTRACT OF THE DISCLOSURE

A passive ATS lubrication system is provided that includes a starter housing, a receptacle and two valves. The starter housing is adapted to couple to a gearbox assembly and includes a supply opening and an exhaust opening that are each configured to provide fluid communication between the gearbox assembly and the starter housing. The receptacle is coupled to the starter housing proximate the supply opening to thereby define a reservoir. The first valve is disposed within the reservoir and configured to open or close the supply opening in response to a pressure differential between the starter housing and the gearbox assembly. The second valve is coupled to the starter housing proximate to the exhaust opening and configured to open or close the exhaust opening in response to the pressure differential between the starter housing and the gearbox assembly.